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L1   ANSWER 1 OF 1  CA  COPYRIGHT 2002 ACS
AN   127:166542  CA
TI   Bath tablets containing encapsulated liquid ingredients
IN   Iwase, Norikazu; Sudo, Takayo; Sato, Hirotaka; Yorozu, Hidenori
PA   Kao Corp., Japan
SO   Jpn. Kokai Tokkyo Koho, 7 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
IC   ICM  A61K007-50
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CC   62-4 (Essential Oils and Cosmetics)
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PI   JP 09175992        A2   19970708       JP 1995-338718   19951226 <--
AB   Bath tablets comprise immobilized encapsulated compds. on the concave
     circles of the tablet surface.  Once the tablets are placed in a hot bath
     water, the capsules are sepd. and dissolved to release liq. active
     ingredients, esp. perfumes and herb exts.  A mixt. contg. NaHCO3 25,
     Na2CO3 24, fumaric acid 40.25, polyethylene glycol 3.5, glucose 5,
dextrin
     1%, colors and perfumes q.s. was press-formed in a die with convex
section
     to give a tablet.  A capsule (mean particle diam. 3.3 mm) contg. octyl
     phthalide 55, perfumes 25, tetraoleate POE sorbitol 16, POE stearyl ether
     4 %, was filled into the concave area of the tablet and melted lauric
acid
     DEA was added to give a capsule-carrying tablet.
ST   bath tablet capsulated essential oil
IT   Bath preparations
     Perfumes
        (bath tablets contg. encapsulated liq. ingredients)
IT   Essential oils
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (bath tablets contg. encapsulated liq. ingredients)


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54. Title of invention: Capsule-containing tablet-type bath additive.

57. [Abstract]

[Means of solving] A tablet-type bath additive in which an encapsulated substance is adhered into concave parts on the surface of the tablets.

[Effects] The liquid component does not leak and it has a mild perfume when dissolved.

Claims

[Claim 1] A tablet-type bath additive characterised in that encapsulated substance is adhered into concave parts on the surface of the tablets.

[Claim 2] A tablet-type bath additive, according to Claim 1, characterised in that the tablet is a foaming tablet.

[Claim 3] A tablet-type bath additive, according to Claim 1, characterised in that the encapsulated substance is adhered by the placing of a substance, which is solid at 30°C and dissolves or melts in hot water, between the capsule film and the concave part of the tablet.

[Claim 4] A tablet-type bath additive, according to Claim 3, characterised in that the substance which is solid at 30°C and dissolves or melts in hot water is a high-molecular and/or a surfactant.

[Claim 5] A tablet-type bath additive, according to Claim 4, characterised in that the high-molecular and/or a surfactant is a substance which dissolves in both organic solvent and water.

[Detailed Description of the Invention]

[Industrial area to which the invention belongs] The present invention relates to a capsule-containing tablet-type bath additive in which the content of the capsules do not leak out and the perfume component which is added to the contents of the capsules gives off a mild perfume when dissolved.

[0002]

[Prior art] Methods of mixing liquid components in tablet-type bath additives have included absorbing the liquid component into an oil-absorbent agent and dispersing this uniformly through the tablet; and absorbing the liquid in an oil absorbent and making this into granules or tablets, mixing these into a foaming agent containing a carbonate or acid as a core and forming this mixture into tablets (as described in JP 61-277611 (A)). These methods, however, involve the problem that the liquid component may leak due to the pressure of tablet making. Also, when a perfume or scent is a part of the liquid component used, the liquid component is released immediately when the foaming occurs in the bath water and the scent given off may be too intense. Furthermore, a high content of liquid component results in a deterioration in the powder mixture, resulting in turn in poorer tablet-making characteristics and a deterioration in productivity.

[003] By contrast, a method has been proposed (in JP 7-69864 (A)) in which the effective liquid component is encapsulated, these capsules mixed with a foaming component and this mixture made into cores for the tablets, with the aim of avoiding leakage and preventing over-intense perfume release.

[0004] In this method, however, the capsules must be made hard in order to withstand the pressure involved in making the tablets. It thus involves the problem that gelatine with a high jelly strength must be used,

and the film ratio of the capsules increased, to strengthen the capsules, causing an increase in the time required for these to dissolve. Also, since the capsules are contained in the tablets as cores, the appearance is identical with conventional tablets and it is impossible to visually distinguish the fact that they do contain capsules.

[0005]

[Problems the invention aims to overcome] Thus the object of the present invention is to propose a capsule-containing tablet-type bath additive from which the liquid component does not leak and which has a mild perfume when dissolved.

[0006]

[Means by which the problems are solved] In this context, the present inventors carried out studies which resulted in the discovery that when an encapsulated substance is adhered to a previously-formed concave part in a tablet to form a bath additive, there is no leakage of liquid from the capsule. Furthermore, when placed in the bath, the capsule immediately detaches from, dissolves separately from, the tablet so that the perfume is not given off immediately but release a mild scent. At the same time, the solubility of the capsule is good. The present invention was completed on the basis of this discovery.

[0007] Thus the present invention proposes a tablet-type bath additive in which an encapsulated substance is adhered into concave parts on the surface of the tablets.

[0007] The components in the encapsulated part of the bath additive according to the invention are not particularly limited but they should be liquid components, particularly perfume components, natural extracts or circulation promoting agents. Specifically, the perfume may be peppermint oil, jasmine oil, camphor oil, white cedar oil, orange-peel oil, rue oil, tangerine oil, orange oil, citron oil, lavender oil, petal oil, clove oil, white-cedar leaf oil, rose oil, eucalyptus oil, lemon oil, thyme oil, peppermint oil, sage oil, bergamot oil, iris oil, pine oil, menthol, dl-menthol, l-menthol, cineol, eugenol, citral, citronellol, citronellal, borneol, linalool, geraniol, phenylethyl alcohol, benzyl acetate, camphor, thymol, spilanthol or pinene.

or pinene.

[0009] Natural extracts may include extracts from natural products such as *senkyu*, orange peel, maize, *toki*, dried orange peel, camomile and peach leaf. These natural extracts may be mixed with water, lower alcohols such as ethanol and isopropanol, oils such as soy oil and olive oil, esteric oils such as isopropyl myristate, solvents such as polyvalent alcohol, or with mixtures of two or more of these.

[0010] Circulation promoting agents may be chosen from vitamin E derivatives such as tocopherol and tocopherol acetate, nicotinic acid derivative such as methyl nicotinate and tocopherol nicotinate; or phthalide derivatives such as butyl phthalide, benzyl phthalide and octyl phthalide.

[0011] In addition to these, oils, waxes, hydrocarbons, higher fatty acids, esters, refined oils, silicones, surfactants etc may also be added.

[0012] The film-forming liquid used to form the film for encapsulation may be the melted form of the film-forming material or a solution which contains the film-forming material. The choice of film-forming material is not particularly limited provided it is hardened by a physical means such as cooling or cross-linking but since, in the present invention it is used as component of a bath additive, it should preferably be a natural, semi-synthetic or synthetic hydrophilic high-molecular with a high affinity for water.

[0013] This hydrophilic high molecular may be, for example, gelatine, collagen protein, casein, sodium alginate, carrageenan, tamarind gum, pectin, gum arabic, guar gum, xanthan gum, traganth gum, locust-bean gum, agar, starch or other natural hydrophilic high-molecular; carboxymethyl cellulose, methyl cellulose, hydroxyethyl cellulose, hydroxypropyl cellulose, acetic acid phthalic acid cellulose, alginic acid, oxidised starch, esterified starch, etherised starch, cationic starch or other semi-synthetic high-molecular; or sodium polyacrylate, polyethylenimine, polyvinyl alcohol, polyethylene oxide, polyvinyl pyrollidone or other synthetic hydrophilic high-molecular. The choice is not limited to these, however. These hydrophilic high-moleculars may be used singly or as mixtures of two or more.

[0014] One, two or more water-soluble polyvalent alcohols or derivatives may be added at the same time as the above hydrophilic high-moleculars. When a water-soluble polyvalent alcohol or derivative is added, the quantity added should be 5~100 wt%, preferably 10~80 wt%. The water-soluble polyvalent alcohol added may be, for example, glycerine, sorbit, ethylene glycol, polyethylene glycol

[0014] The water-soluble polyvalent alcohol added may be, for example, glycerine, sorbit, ethylene glycol, polyethylene glycol, propylene glycol, polypropylene glycol, ethylene oxide - propylene oxide copolymer, oligosaccharide or glyceride; but the choice is not limited to these.

[0015] It is also possible to produce coloured capsules by the addition of a colouring to the film-forming material. If this is done, the appearance of the tablets is improved and gives an improved feeling of luxury to the bathing experience.

[0016] The encapsulated material used in the present invention may be obtained by a conventional spray-drying method, solution hardening film method, coacervation method or solution drying method but in the method according to the invention it is preferable to use a seamless encapsulation method with multiple nozzles, preferable double nozzles or triple nozzles.

[0017] Thus, when a surfactant is added to the solution to be encapsulated, a device with triple nozzles with progressively increasing diameter should preferably be used whereas when no surfactant is added a device with a double nozzle should be used. With the device with a triple nozzle, the film-forming solution is continuously discharged from the outermost nozzle, an aqueous suspension containing the surfactant component of the solution to be encapsulated is continuously discharged from the innermost nozzle and the oil component of the solution to be encapsulated is continuously discharged from the intermediate nozzle into a cooled solution. This forms three-layer droplets. Next, seamless capsules are obtained by hardening or gelating the film-forming material in these three-layer droplets and then drying these and removing the water content from the film and the contents. When a double-nozzle device is used, the film-forming solution is continuously discharged from the outer nozzle and the liquid active component is discharged continuously from the inner nozzle into a cooling solution. Next, seamless capsules are obtained by hardening or gelating the film-forming material in these two-layer droplets and then drying them.

[0018] The capsules formed should be 0.5~5mm in diameter, and should have a film ratio (= film weight / capsule weight) of 5~60 wt%, preferably 10~30 wt% and the film thickness should be in the range 0.02 ~ 1 mm, preferably 0.05 ~ 0.3 mm. The content of the active liquid component may be varied according to the intended use of the tablets but should preferably be 0.01 ~ 20%, preferably 0.1 ~ 10%, of the total bath additive.

[0019] The bath additive according to the invention should preferably be a foaming type and may contain, for example, be a carbonate or acid.

[0020] The carbonate may be, for example, sodium hydrocarbonate, sodium carbonate, sodium sesquicarbonate, potassium carbonate or magnesium carbonate. These may be used either singly or in combinations of two or more.

[0021] The acid may be an organic acid such as fumaric acid, succinic acid, tartaric acid, malic acid, citric acid, lactic acid, adipic acid, pyrollidone carbonic acid, and acidic salts of these; an organic acid or organic salt such as boracic acid, disodium hydrophosphate or sodium sulphite. The contents of these carbonates and acids should be 10~80wt%, preferably 30~60wt%, of the total bath additive.

[0022] It is also possible to add the conventional bath additive ingredients noted below to the

bath additive according to the invention but the additives which may be added to the bath additive according to the invention are not limited to those given below.

(a) Inorganic compounds and inorganic salts

Sodium chloride, potassium chloride, ammonium chloride, potassium sulphide, sodium sulphide, calcium oxide, magnesium oxide, potassium nitrate, sodium nitrate, calcium nitrate, iron sulphite, metasilicic acid, anhydrous silicic acid, neutral clay, sodium thiosulphate, sodium polyphosphate, sodium metaphosphate, sodium phosphate, calcium hydrogen phosphate, potassium bromide, slaked lime, sodium hyposulphite, calcium thiosulphate, sodium hydroxide, mica powder, boracic acid or borax.

[0023] (b) Refined oils and perfumes

The perfume components have been listed above. If a large quantity of such perfumes are added to the tablets, however, this may hamper the effects of the invention and they should therefore be added to the contents of the capsules.

[0024] (c) Colourings

Blue 1, Blue 2, Yellow 4, Yellow 5, Green 3, Green 4, Green 204, Yellow 202 (1) or other colourings approved by the Ministry of Health and Welfare and listed in Tar Dye Tables I and II; chlorophyll, riboflavin, crocin, anthraquinone, cochineal, canthaxanthin, saffron or other natural colouring approved for food use may be used. These colourings may also be used in the film which forms the capsule skin.

[0025] (d) Fine powder

This should be what is generally known as 'cosmetic powder' and may be acrylic resin, styrene resin, epoxy resin, silicon resin, nylon, polyethylene, polypropylene, polyvinyl chloride, PET, polytetrafluoroethane or other high-molecular; copolymers of these high-moleculars; calcium silicate, natural aluminium silicate, synthetic aluminium silicate, zeolite, titanium oxide, talc, kaolin, mica or bentonite.

[0026] (e) Water soluble high-moleculars

PEG, CMC, PVP, gelatine, agar, gum arabic, guar gum etc.

[0027] (f) Others

Flowers of sulphur, sulphur, casein, sodium salicylate, dried rice bran, dextrin, defatted dried milk, urea, amino acids, surfactants and sugars may also be added.

[0028] In addition to the substances noted above, the following may also be added when necessary to the bath additive according to the invention: germicides (such as benzoic acid ester or sorbinic acid), metal capturing agents e.g EDTA and NTA), proteolytic enzymes and other additives. The tablet part of the bath additive according to the invention may be formed by pressing using a punch with a raised part in the centre. There may also be multiple

concave parts on the tablet according to the invention and the shape of these is not limited but may be circular, rectangular or crescent-shaped or any other shape.

[0029] The bath additive according to the invention has encapsulated material in a concave part on the surface of the tablet. This adhesion should preferably be performed by placing a substance which is solid at 30°C, preferably 35°C, and which dissolves or melts in hot water, between the capsule and the tablet surface. Also, since the temperature of hot bath water is usually in the range 38~42°C it is necessary that this substance dissolves or melts consistently in this temperature range and it is preferable that it should dissolve. There is no lower limit to the temperature at which this substance dissolves in bath water and it may be below 38°C. On the other hand if the melting temperature of a substance which melts in hot water is too low, it is not possible to achieve stable adhesion to the tablet, while if it is too high it will not melt in the bath water. Accordingly the substance should melt in the temperature range 30°C to 42°C, preferably 35°C to 42°C.

[0030] This adhesive material may be a melting material such as a higher alcohol or a dissolving material such as water-soluble high-molecular and/or surfactant. Preferable water-soluble high-molecculars include polyethylene glycol, hydroxypropyl cellulose, hydroxypropylmethyl cellulose or other cellulose water-soluble high-molecular. The surfactant should preferably be a nonionic surfactant such as, for example, polyoxyethylene polyoxypropylene glycol, polyethylene glycol monofatty acid ester (preferably polyethylene glycol monostearic acid ester) or fatty acid diethanolamide (preferably lauric acid diethanolamide). These components may be used singly or in combinations of two or more.

[0031] The following two methods of adhesion may be used.

[0032] The first method is one in which an adhesive material is heated at the time that the capsules are placed in the concave part and cooled to adhere the capsules. The adhesive substance used in this case should preferably be water-soluble and also be solid at 30°C. It is preferable that the substance used should have a melting point in the range 30~70°C, preferably 40~50°C. If the melting point of this substance is too high, it does not readily dissolve in bath water while if the melting point is too low it may be liable to become detached from the tablet. When this method is adopted, it is preferable to use polyethylene glycol and nonionic surfactant as the adhesive material.

[0033] In the second method, when the encapsulated material is placed in the concave part, an adhesive substance dissolved in an organic solvent is added and the solvent removed to adhere the capsule. When this method is used, any water-soluble high-molecular can be used provided that it is soluble both in water and in organic solvents. This water-soluble high-molecular may be, for example, hydroxypropyl cellulose, hydroxypropylmethyl cellulose or

other water-soluble high-molecular cellulose.

[0034] Another method of adhesion may be used. This may be, for example, one in which the entrance to the concave parts is covered with a water-soluble film or one in which the film forming the capsule wall is formed is itself made adhesive.

[0035]

[Effects of the invention] In the bath additive according to the invention, there is no leakage of the contents of the capsule and the capsules detach from the tablet as soon as they are placed in bath water and dissolves separately so that the perfume component is not given off immediately but is released gradually to produce a mild perfume. The solubility of the capsule is good and the colouring of the capsule gives the bath a greater feeling of luxury.

[0036]

[**Examples**] Below the invention is described in greater detail though examples but the scope of the invention is not limited by these.

[0037] **Preparation Example 1**

Preparation of the capsules: a device with a triple nozzle with gradually increasing diameters (inner nozzle 0.2mm; middle nozzle 0.28mm; outer nozzle 0.35mm) was used. Tetraoleic acid POE (60) sorbit (POE is polyoxyethylene) 12.56wt%, POE (6) stearyl ether 3.14 wt%, and octyl phthalide 8.32wt% were mixed, water 75.98wt% was added to this to obtain an aqueous suspension and this was discharged from the inner nozzle at 40 ml/minute. Octyl phthalide 63.92% and perfume 36.08wt% were mixed together to form the oily component and this was discharged from the middle nozzle at 26.52 ml/minute. And gelatine 28.5wt%, saccharose 28.5wt%, concentrated glycerine 3.79wt%, water 39.2% and Green 3 0.003wt% were mixed to produce an aqueous solution which was kept at 70°C while being discharged from the outer nozzle at 14.27 ml/minute. These were discharged into cooled tri (caprylic acid, caprinic acid) glycerine to form multi-layer droplets and capsules were formed by vibration at 35 Hz.

[0038] These capsule droplets were dewatered in an 80% ethanol aqueous solution for 30 minutes at 12°C and then dried at 35°C and 20%RH for 16 hours and then at 35°C and 20%RH for a further 24 hours, in a drier fitted with a tumbler, to obtain an encapsulated substance.

[0039] The liquid encapsulated in these capsules consisted of octyl phthalide 55wt%, perfume 25wt%, tetraoleic acid POE (60) sorbit 16wt% and POE (6) stearyl ether 4wt%. The composition of the capsule film was gelatine 46.875wt%, saccharose 46.875 wt%, concentrated glycerine 6.245wt% and Green 3 0.005wt% and the film ratio was 20%. When the particle size of the capsules was measured using a micrometer, the mean particle size was

found to be 3.3mm.

[0040] **Preparation Example 2**

Preparation of the tablets: the components of the tablets were: sodium hydrocarbonate 25wt%, sodium carbonate 24wt%, fumaric acid 40.25wt% polyethylene glycol (mean molecular weight 60000) 3.5wt%, dextrose 5wt%, dextrin 1wt%, and small quantities of colouring and perfume were mixed together (as a tablet base).

[0041] 48.6g of this tablet base was taken and a part was placed in a 48.5mm square mould and this was pressed at a gauge pressure of 200kg/cm^2 using a punch with a raised part in the centre to obtain 48.6g of the tablets according to the invention.

[0042] The tablets were flat and a square in shape with sides of 48.5mm and were 16.4 mm thick. The distance between the edges of the concave part made in the centre of the surface was 25mm and the deepest part was 15 mm across and it was 112 mm deep. Also the inner wall was convex conical shape.

[0043] **Preparation Example 3**

Preparation of the capsules

Preparation of the capsules: a device with a triple nozzle with gradually increasing diameters (inner nozzle 0.2mm; middle nozzle 0.28mm; outer nozzle 0.35mm) was used. An aqueous suspension obtained by mixing saccharose fatty acid ester 1.57wt%, perfume 0.832wt% and water 97.598% was discharged from the inner nozzle at 40 ml/minute. Perfume was discharged from the middle nozzle at 26.52 ml/minute. Low-molecular-weight (mean molecular weight 50,000, viscosity 19mps) gelatine 28.5wt%, saccharose 28.5wt%, concentrated glycerine 3.79wt%, water 39.2wt%, Red 106 0.003wt%, were mixed together to produce an aqueous solution which was kept at 70°C while being discharged from the outer nozzle at 14.27 ml/minute. These were discharged into cooled tri (caprylic acid, caprinic acid) glycerine to form multi-layer droplets and capsules were formed by vibration at 35 Hz. These capsule droplets were dewatered in an 80% ethanol aqueous solution for 16 hours at 15°C for 30 minutes and then dried at 35°C and 20%RH for a further 24 hours, in a drier fitted with a tumbler, to obtain encapsulated substances. The liquid encapsulated in these capsules consisted of perfume 98wt% and saccharose fatty acid ester 2wt%. The composition of the capsule film was low-molecular-weight gelatine 46.875wt%, concentrated gelatine 6.245wt% and Red 106 0.005wt% and the film ratio was 20%. When the particle size of the capsules was measured using a micrometer, the mean particle size was found to be 3.3mm.

[0044] **Preparation Example 4**

Preparation of tablets

49.65g of the same tablet base as in Preparation Example 2 was taken and a part was placed

in a 48.5mm square mould and this was pressed at a gauge pressure of 200kg/cm^2 using a punch with raised part in the centre to obtain 49.65g of the tablets according to the invention. The tablets were flat and a square in shape with sides of 48.5mm and 16.5 mm thick. The distance between the edges of the concave part made in the centre of the surface was 25mm and the deepest part was 5 mm across and it was 8.5 mm deep. Also the inner wall was a convex inverted cone in shape.

[0045] **Examples 1~6**

Adhesion of capsules to tablets

Example 1

1.04g of the capsules obtained in Preparation Example 1 (liquid contained 0.83g) was taken and when these were placed in the concave parts of the tablets obtained in Preparation Example 2, 0.36g of polyoxyethylene (POE) (160) polyoxypropylene (POP) (30) glycol melted at 60°C was added and then this was cooled for 2 hours at 25°C and 45% RH. 50g of tablets with attached capsules were obtained.

Example 2

1.04g of the capsules obtained in Preparation Example 1 (liquid contained 0.83g) was taken and when these were placed in the concave parts of the tablets obtained in Preparation Example 2, 0.36g of diethanol laurate melted at 60°C was added and then this was cooled for 2 hours at 25°C and 45% RH. 50g of tablets with attached capsules were obtained.

[0047] **Example 3**

1.04g of the capsules obtained in Preparation Example 1 (liquid contained 0.83g) was taken and when these were placed in the concave parts of the tablets obtained in Preparation Example 2, 1g of hydroxypropyl cellulose (36%) dissolved in ethanol (64%) was added and then this was left for 16 hours at 25°C and 45% RH to remove the ethanol. 50g of tablets with attached capsules were obtained.

[0048] **Example 4**

0.25g of the capsules obtained in Preparation Example 3 (liquid contained 0.2g) was taken and when these were placed in the concave parts of the tablets obtained in Preparation Example 4, 0.1g of polyethylene glycol 1500 melted at 60°C was added and then this was cooled for 2 hours at 25°C and 45% RH. 50g of tablets with attached capsules were obtained.

[0049] **Example 5**

0.25g of the capsules obtained in Preparation Example 3 (liquid contained 0.2g) was taken and when these were placed in the concave parts of the tablets obtained in Preparation Example 4, 0.1g of POE (40) monostearic acid ester melted at 60°C was added and then this was cooled for 2 hours at 25°C and 45% RH. 50g of tablets with attached capsules were

obtained.

[0050] **Example 6**

0.25g of the capsules obtained in Preparation Example 3 (liquid contained 0.2g) was taken and when these were placed in the concave parts of the tablets obtained in Preparation Example 4, 0.5g of hydroxypropylmethyl cellulose (20%) dissolved in ethanol (80%) was added and then this was left for 16 hours at 25°C and 45% RH to remove the ethanol. 50g of tablets with attached capsules were obtained.

[0051] **Comparison 1**

0.83 g of an oil component with the same composition as the contents of the capsule in Preparation Example 1 (octyl phthalide 16wt%, tetraoleic acid POE (60) sorbit 16wt%, POE (6) stearyl ether 4wt%) was absorbed into 1.66g of dextrin and pulverised. This base was mixed with 47.51g of the above-noted tablet base and this mixture was placed in a 48.5mm square mould and pressed at a gauge pressure of 200kg/cm^2 using a punch to obtain 50g of tablets.

[0052] **Comparison 2**

1.04g of the capsules obtained in Preparation Example 1 (contents 0.83g) was mixed with 48.96g of the tablet base obtained in Preparation Example 2 and this mixture was placed in a 48.5mm square mould and pressed at a gauge pressure of 200kg/cm^2 to obtain 50g of tablets.

[0053] **Comparison 3**

25g of the tablet base obtained in Preparation Example 2 was taken and placed in a 48.5mm square mould. Then after an initial pressure had been applied, 1.04 g of the capsules obtained in preparation Example 1 were placed on top of this, 23.96 of the same tablet base added to this and this was pressed at a gauge pressure of 200kg/cm^2 to obtain 50g of tablets.2

[0054] **Comparison 4**

0.2 g of an oil component with the same composition as the contents of the capsule in Preparation Example 3 (perfume 98wt%, saccharose fatty acid ester 2wt%) was absorbed into 0.4g of dextrin and pulverised. This powder was mixed with 49.4g of the above-noted tablet base and this mixture was placed in a 48.5mm square mould and pressed at a gauge pressure of 200kg/cm^2 to obtain 50g of tablets.

[0055] **Comparison 5**

0.25g of the capsules obtained in Preparation Example 3 (contents 0.2g) was mixed with 49.75g of the tablet base obtained in Preparation Example 2. This was packed into a 48.5mm square mould and pressed at a gauge pressure of 200kg/cm^2 to obtain 50g of tablets.

[0056] **Comparison 6**

25g of the tablet base obtained in Preparation Example 2 was taken and placed in a 48.5mm

square mould. Then after an initial pressure had been applied, 0.25 g of the capsules obtained in preparation Example 3 were placed on top of this, 24.75 of the same tablet base added to this and this was pressed at a gauge pressure of 200kg/cm^2 to obtain 50g of tablets.

[0057] **Test Example 1**

The preparations obtained in Examples 1~6 and Comparisons 1~6 were dissolved in 150 litres of water at 40°C in a bath tub and the scent, leakage and capsule splitting were evaluated against the criteria shown below. The results are shown in Tables 1 and 2.

[0058]

[Table 1]

{PRIVATE} Sample		Examples					
		1	2	3	4	5	6
Scent when dissolved		O	O	O	O	O	O
Tablet appear-ance	Leakage	O	O	O	O	O	O
	Capsule splitting	O	O	O	O	O	O

[Table 2]

{PRIVATE} Sample		Comparisons					
		1	2	3	4	5	6
Scent when dissolved		X	X	#	X	X	#
Tablet appear-ance	Leakage	O	#	O	O	#	O
	Capsule splitting	-	X	#*	-	X	#*

* In Comparisons 3 and 6, the tablet fractured.

[0060] <Criteria>

Scent when dissolved

O: Mild scent

#: Scent rather intense

X: Scent intense

[0061] Leakage

O: No leakage

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